# Math 212 S02 Syllabus

Instructor: Anastassia Etropolski
Office: HBH 412
Classroom: HRZ AMP
Textbook: Calculus: Early Transcendentals, 8/e by James Stewart

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Class Time: MWF 11:00 - 11:50
Office Hours: M 2-3, Tu 10-12

**Website:** http://math.rice.edu/~ae22/212S17.html

## Course Aims

This course will extend the concepts and techniques of single-variable calculus to multiple variables. While it is more difficult to visualize the functions and surfaces we will do computations with, the techniques will not be all that different from what you are used to, and the setting is somewhat more natural, as we do not live in a 2-dimensional space. The course will begin by familiarizing you with 3-dimensional space and the various ways in which we interpret it. One main difference between this course and single-variable calculus is that we will quickly pivot to the language of vectors. Most of this should be somewhat familiar to you if you've taken a linear algebra course, or else you may have come across the language and tools in a physics course. From there we will move quickly through the standard objects we study in calculus (limits, derivatives, integrals) with a focus on the concepts and how they differ from the single-variable setting. The course will conclude with Stokes' Theorem and the Divergence Theorem.

## Homework

Homework will be due weekly, usually at the beginning of class on **Wednesday**. All homework exercises will be posted to Owl-Space and on the course website. No late homework will be accepted, barring a documented illness or other emergency. However, the two lowest-scoring homework grades will be dropped. You are encouraged to work together on the homework, but each student must turn in their own assignment. Please make a genuine effort to write your homework out neatly with adequate space for each problem. This is not only to help the graders, but also to help you earn all the points you can on each problem.

The assigned problems will be taken directly out of the textbook. If you are using an older edition, it is your responsibility to get the correct exercises either from another student or from the library.

## Exams

There will be two midterm exams and a final exam. The midterm exams will not be cumulative, but the final exam will cover material from the entire semester. The midterm exams will be **Thursday, February 16th** and **Wednesday, March 29th**. Both exams will be from 7-9pm in the evening, but the exams will be intended to take about 90 minutes. If you have a conflict with either of these dates, you must let me know by the end of the first week of class. Otherwise, no excuse other than a documented medical emergency will be accepted for missing the exam.

The date for the final exam is set by the Registrar's office and is not available at this time. It is the policy of the Mathematics Department that no final may be given early to accommodate student travel plans. If you make travel plans that later turn out to conflict with the scheduled exam, then it is your responsibility to either reschedule your travel plans or take a zero on the final.

## Grading Policy

The grading scheme is as follows:

Homework: 20%  Midterm Exams: 50% (25% each)  Final Exam: 30%

## Course Policies

*Attendence:* You are expected to attend class every day, however there is no penalty for absences. Furthermore, inquiries will be made if poor attendence is coupled with poor academic performance. If you cannot be present on an exam day due to illness or a university-sanctioned off-campus commitment, you must contact me beforehand.

**Travel for personal reasons is not a valid reason for missing an exam, so you should consult the exam dates before making any travel plans.**

*Calculators:* Calculators will not be necessary for any of the homework or examinations, and therefore will not be allowed during those times.

*Laptops:* Laptops are allowed so long as they are used solely for course-related matters. Any indication otherwise will cause the privilege to be revoked. Laptops as well as cell phones of any kind are not permitted during examinations.

*Honor Code:* As a student at Rice University, you pledge to uphold the Rice Honor Code, which you can find in the Honor System Handbook here:

`http://honor.rice.edu/honor-system-handbook/`

The exception is when you are working on the homework, during which you are encouraged to work with other students. You may not, however, look up solutions online or in any other manner. If you are truly stumped by the homework, you should e-mail me or see me during office hours. You are expected to write up and understand the homework yourself. The purpose of the homework is to help you learn and internalize the material, and most importantly, to root out the cause of any confusion. Remember: making mistakes is how we learn.

## Resources

*Disability Support:* Students who think they may need accommodations in this course because of the impact of a disability should give me a written letter from Disability Support Services within the first two weeks of the course.

*Office Hours:* My office hours are designed to be a time when any student can feel free to come by to talk with me about the course. You do not need to inform me that you are coming, and you do not even need to have specific questions ready for me to answer. For example, you should feel free to come by if you want some designated time to work on homework problems, if you had trouble following a lecture, or if you want to go over specific topics that you had trouble with.

*Comments and Concerns:* Do not hesitate to come to me with any feedback about my teaching, as well as comments and concerns about the course.

**Disclaimer:** This syllabus is a general plan for the course; deviations may be necessary.